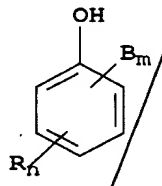
WHAT IS CLAIMED IS:

1. A color photothermographic element comprising at least three light-sensitive units which have their individual sensitivities in different wavelength regions, each of the units comprising at least one light-sensitive silver-halide emulsion, binder, and dye-providing coupler, and a blocked developer in the presence of an effective amount of a thermal solvent represented by the following structure



wherein the substituent B is independently selected from a substituent where an oxygen, carbon, nitrogen phosphorus or sulfur atom is linked to the ring as part of an ester, amido, ether, aminosulfonyl, sulfamoyl, carbonyl, (acyl) or sulfonyl group;

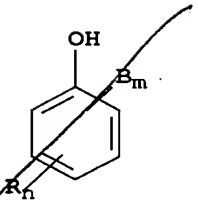
m is 0 to 4; and

wherein the substituent R is independently selected from a substituted or unsubstituted alkyl, cycloalkyl, aryl, alkylaryl, or forms a ring with another substituent on the ring;

n is 0 to 4; and

wherein m+n is 1 to 5.

2. A color photothermographic element comprising at least three light-sensitive units which have their individual sensitivities in different wavelength regions, each of the units comprising at least one light-sensitive silver-halide emulsion, binder, and dye-providing coupler, and a blocked developer in the presence of a thermal solvent having a melting point of at least 80°C, represented by the following structure



wherein the substituent B is independently selected from a substituent where an oxygen, carbon, nitrogen, phosphorus or sulfur atom is linked to the ring as part of a ketone, aldehyde, ester, amido, carbamate, ether, aminosulfonyl, sulfamoyl, sulfonyl, amine, phosphine, or aromatic heterocylcic group;
m is 0 to 4; and
wherein the substituent R is independently selected from a substituted or unsubstituted alkyl, cycloalkyl, aryl, alkylaryl, or forms a ring with another substituent on the ring;
n is 0 to 4; and
wherein m+n is 1 to 5.

3. The color photothermographic element of claim 1 wherein B is selected from the group consisting of $-C(=O)NHR^2$, $-NHC(=O)R^2$, $-NHSO_2R^2$, $-COR^2$, $-SO_2NHR^2$, and $-SO_2R^2$ wherein R^2 is substituted or unsubstituted alkyl, cycloalkyl, aryl, alkylaryl, heterocyclic group and can optionally comprise a phenolic hydroxyl group.

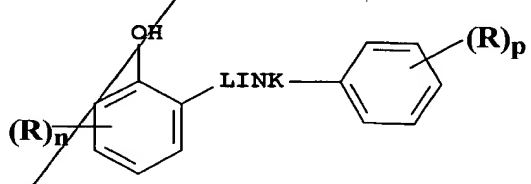
4. The color photothermographic element of claim 2 wherein B is selected from the group consisting of $-C(=O)NHR^2$, $-NHC(=O)R^2$, $-NHSO_2R^2$, $-SO_2NHR^2$, $-SO_2R^2$, $-C(=O)R^2$, $-C(=O)OR^2$, and $-OR^2$, wherein R^2 is substituted or unsubstituted alkyl, cycloalkyl, aryl, alkylaryl, heterocyclic group and can optionally comprise a phenolic hydroxyl group.

5. The color photothermographic element of claim 2 wherein the melting point is between 100 and 250°C.

6. The color photothermographic element of claim 2 wherein when m is 0, n is at least 1 and there is a second phenolic group on an R substituent.

7. The color photothermographic element of claim 3 wherein n is 1 and R^2 is a substituted or unsubstituted phenyl substituent.

8. The color photothermographic element of claim 2 wherein the melt former has the following structure:



wherein LINK is selected from the group consisting of -C(=O)NH- , -NHC(=O)-, $-NHSO_2-$, -C(=O)-, -C(=O)O-, $-O(R^3)-$, $-SO_2NH-$, and $-SO_2-$; where R^3 is an alkyl group and R and n is as defined above; and p is 0 to 4.

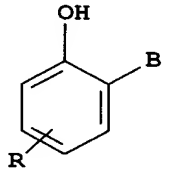
9. The color photothermographic element of claim 8 wherein R is independently selected from substituted or unsubstituted C1 to C10 alkyl group.

10. The color photothermographic element of claim 2 wherein n+p is 1 and R is a C1 to C6 alkyl group.

11. The color photothermographic element of claim 1 wherein the thermal solvent is 2-hydroxybenzamide or a derivative thereof.

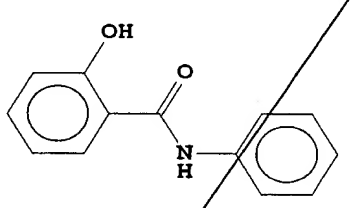
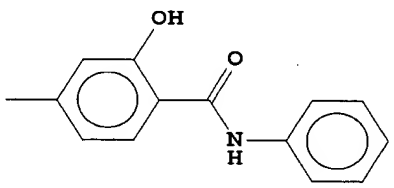
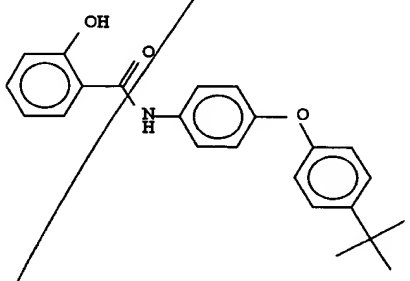
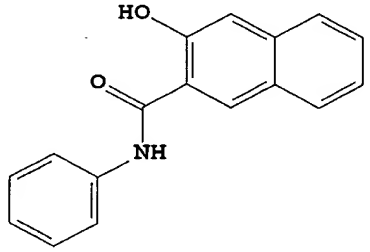
12. The color photothermographic element of claim 1 in which the thermal solvent is present in the amount of 0.01times to 0.5 times the amount by weight of coated gelatin per square meter.

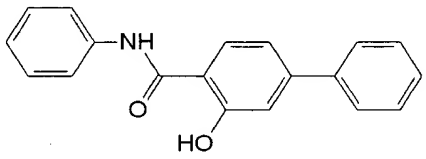
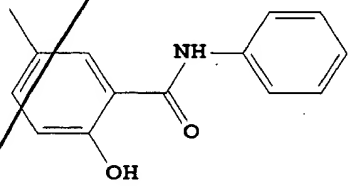
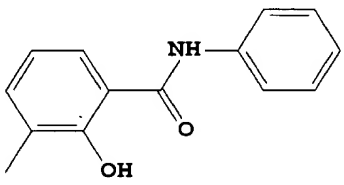
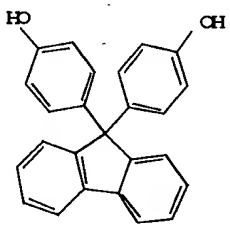
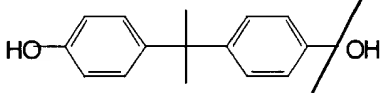
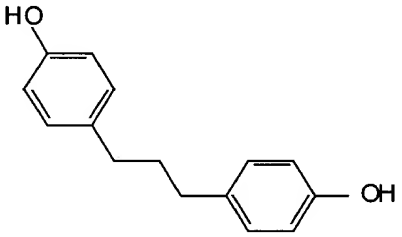
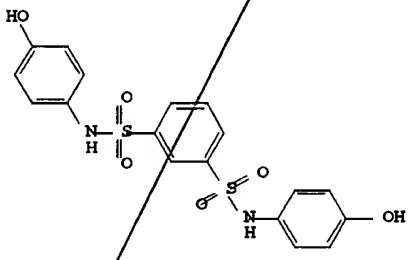
13. The color photothermographic element of claim 1, comprising a radiation sensitive silver halide, and a thermal solvent represented by the following structure



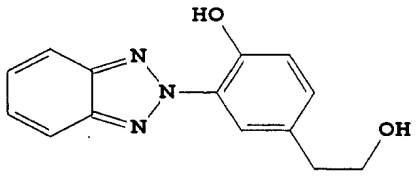
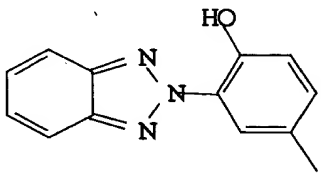
wherein B and R are as described in claim 1.

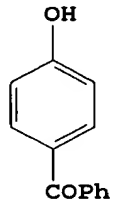
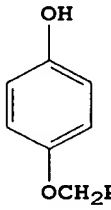
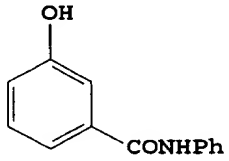
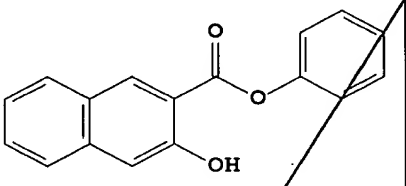
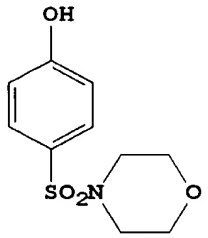
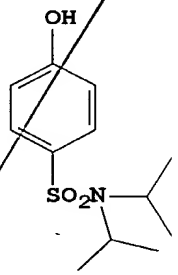
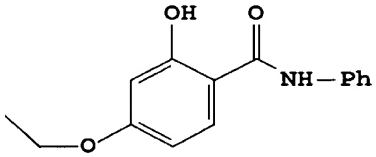
14. The photothermographic element of claim 3 wherein the thermal solvent is selected from the group consisting of:

MF-1		MF-2	
MF-3		MF-4	

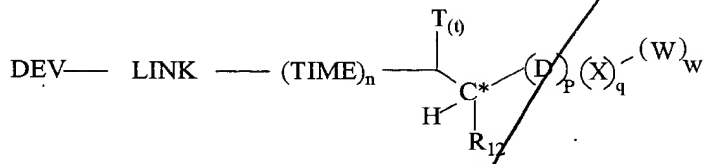
MF-5		MF-6	
MF-7		MF-8	
MF-9		MF-10	
MF-11			

15. The photothermographic element of claim 2 wherein the thermal solvent is selected from the group consisting of:

MF12		MF13	

MF15			
MF16		MF17	
MF18		MF19	
MF20			
MF22			

16. A color photothermographic element according to claim 1, wherein the blocked developer is a compound represented by the following structure:



wherein:

DEV is a developing agent;

LINK is a linking group;

TIME is a timing group;

n is 0, 1, or 2;

t is 0, 1, or 2, and when t is not 2, the necessary number of hydrogens (2-t) are present in the structure;

C* is tetrahedral (sp^3 hybridized) carbon;

p is 0 or 1;

q is 0 or 1;

w is 0 or 1;

p + q = 1 and when p is 1, q and w are both 0; when q is 1, then w is 1;

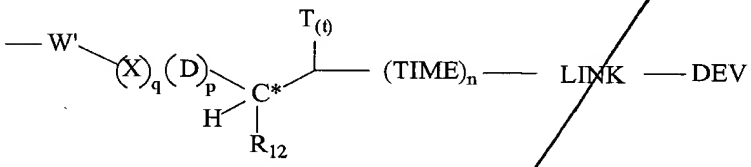
R_{12} is hydrogen, or a substituted or unsubstituted alkyl, cycloalkyl, aryl or heterocyclic group or R_{12} can combine with W to form a ring;

T is independently selected from a substituted or unsubstituted (referring to the following T groups) alkyl group, cycloalkyl group, aryl, or heterocyclic group, an inorganic monovalent electron withdrawing group, or an inorganic divalent electron withdrawing group capped with at least one C1 to C10 organic group (either an R_{13} or an R_{13} and R_{14} group), preferably capped with a substituted or unsubstituted alkyl or aryl group; or T is joined with W or R_{12} to form a ring; or two T groups can combine to form a ring;

D is a first activating group selected from substituted or unsubstituted (referring to the following D groups) heteroaromatic group or aryl group or monovalent electron withdrawing group, wherein the heteroaromatic can optionally form a ring with T or R_{12};

X is a second activating group and is a divalent electron withdrawing group;

W is W' or a group represented by the following structure:



W' is independently selected from a substituted or unsubstituted (referring to the following W' groups) alkyl (preferably containing 1 to 6 carbon atoms), cycloalkyl (including bicycloalkyls, but preferably containing 4 to 6 carbon atoms), aryl (such as phenyl or naphthyl) or heterocyclic group; and wherein W' in combination with T or R_{12} can form a ring;

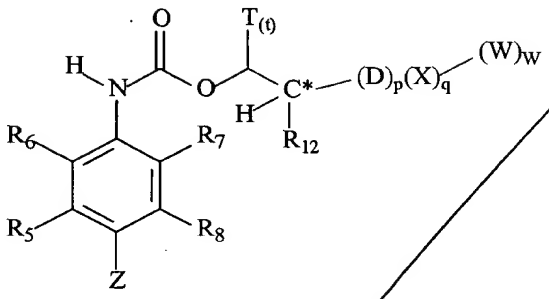
R_{13} , R_{14} , R_{15} , and R_{16} can independently be selected from substituted or unsubstituted alkyl, aryl, or heterocyclic group;

any two members of the following set: R_{12}, T, and either D or W, that are not directly linked may be joined to form a ring, provided that creation of the ring will not interfere with the functioning of the blocking group;

wherein the T, R_{12}, D, X and W groups are selected such that the blocked developer has a half-life ($t_{½}$) ≤20 min, and a peak discrimination, at a temperature of at least 60°C, of at least 2.0.

17. The photothermographic element of claim 1 wherein Dp is 3 to 10 and Dp is at a temperature of 100 to 160°C.

18. A color photothermographic element according to claim 16, wherein the blocked developer is a compound represented by the following structure:

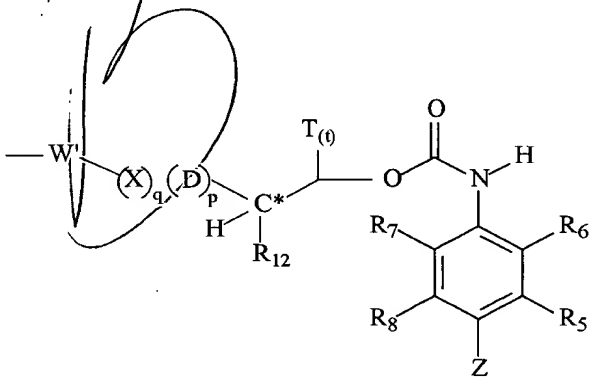


wherein:

Z is OH or NR_2R_3, where R_2 and R_3 are independently hydrogen or a substituted or unsubstituted alkyl group or R_2 and R_3 are connected to form a ring;

R_5, R_6, R_7, and R_8 are independently hydrogen, halogen, hydroxy, amino, alkoxy, carbonamido, sulfonamido, alkylsulfonamido or alkyl, or R_5 can connect with R_3 or R_6 and/or R_8 can connect to R_2 or R_7 to form a ring;

W is either W' or a group represented by the following structure:



wherein T, t, C*, R_{12}, D, p, X, q, W' and w are as defined above.

19. A photothermographic element according to claim 18, wherein X is a sulfonyl or a cyano group and Z is NR_2R_3.

20. A photothermographic element according to claim 18, wherein when T is an electron withdrawing group or a heteroaromatic group, or an aryl substituted with one or more electron withdrawing groups.

21. A photothermographic element according to claim 18, wherein when T is $-SO_2-$, $-OSO_2-$, $-NR_{14}(SO_2)-$, $-CO_2-$, $-CCl_2-$, or $-NR_{14}(C=O)-$ group capped with a substituted or unsubstituted alkyl, aryl, or heteroaromatic group.

22. A photothermographic element according to claim 18, wherein T is a trifluoromethyl group, 2-nitrophenyl group, a thienyl group or a furyl group.

23. A photothermographic element according to claim 1 wherein the photothermographic element contains an imaging layer comprising, in addition to the blocked developer, a light sensitive silver halide emulsion, and a non-light sensitive silver salt oxidizing agent.

24. A photothermographic element according to claim 1 that is capable of dry development without the application of aqueous solutions.

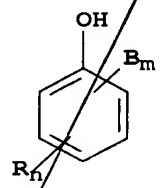
25. A photothermographic element according to claim 1 comprising a melt former for the blocked developer.

26. A photothermographic element according to claim 1 comprising a mixture of at least two organic silver salts, at least one of which is a non-light sensitive silver salt oxidizing agent.

27. A photothermographic element according to claim 1 that does not comprise an effective amount of a basic metal compound slightly soluble in water for unblocking the blocked developer.

28. A photothermographic element according to claim 1 wherein the imaging layer does not have a pH of more than 7, even in the presence of water.

29. A method of image formation comprising the step of developing an imagewise exposed photothermographic element comprising at least three light-sensitive units which have their individual sensitivities in different wavelength regions, each of the units comprising at least one light-sensitive silver-halide emulsion, binder, and dye-providing coupler, and a blocked developer having a half-life ($t_{½}$) ≤20 min, and a peak discrimination, at a temperature of at least 60°C, of at least 2.0, which blocked developer and coupler is developed in the presence of a thermal solvent having the following formula:



I

wherein the substituent B is independently selected from a substituent where an oxygen, carbon, nitrogen phosphorus or sulfur atom is linked to the ring as part of of a ketone, aldehyde, ester, amido, carbamate, ether, aminosulfonyl, sulfamoyl, sulfonyl, amine, phosphine, or aromatic heterocylcic group;
m is 0 to 4; and
wherein the substituent R is independently selected from a substituted or unsubstituted alkyl, cycloalkyl, aryl, alkylaryl, or forms a ring with another substituent on the ring;
n is 0 to 4; and
wherein m+n is 1 to 5.

30. The method of claim 29 wherein the substituent B is linked to the ring as part of an ester, amido, ether, aminosulfonyl, sulfamoyl, sulfonyl or sulfone group;

31. The method of claim 29 wherein Dp is 3 or greater and Dp is at a temperature of 100 to 160°C.

32. A method according to claim 29, wherein said developing comprises treating said imagewise exposed element at a temperature between about 80°C and about 180°C for a time ranging from about 0.5 to about 60 seconds.

33. A method according to claim 29, wherein said developing comprises treating said imagewise exposed element to a volume of processing solution is between about 0.1 and about 10 times the volume of solution required to fully swell the photographic element.

34. A method according to claim 29, wherein the developing is accompanied by the application of a laminate sheet containing additional processing chemicals.

35. A method according to claim 29, wherein the applied processing solution is a base, acid, or pure water.

36. A method according to claim 29 wherein image formation comprises the step of scanning an imagewise exposed and developed imaging element to form a first electronic image representation of said imagewise exposure.

37. A method according to claim 29 wherein the image formation comprises the step of digitizing a first electronic image representation formed from an imagewise exposed, developed, and scanned imaging element to form a digital image.

38. A method according to claim 29 wherein image formation comprising the step of modifying a first electronic image representation formed from and imagewise exposed, developed, and scanned imaging element formulated to form a second electronic image representation.

39. A method according to claim 29 comprising storing, transmitting, printing, or displaying and electronic image representation of an image derived from an imagewise exposed, developed, scanned imaging element.

40. A method according to claim 39, wherein printing the image is accomplished with any of the following printing technologies: electrophotography; inkjet; thermal dye sublimation; or CRT or LED printing to sensitized photographic paper.

41. A method according to claim 39 wherein the photothermographic element contains an imaging layer comprising, in addition to the blocked developer, a light sensitive silver halide emulsion, and a non-light sensitive silver salt oxidizing agent.

42. A method according to claim 29 wherein the developing is accomplished in a dry state without the application of aqueous solutions.

43. A method according to claim 29 wherein the melt former has a melting point of at least 100°C.

44. A method according to claim 29 wherein the melt former has a melting point of at least 100°C but melts at the temperature of development to obtain image formation.